



IFWO

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/643,795A

DATE: 08/13/2004

TIME: 15:39:27

Input Set : A:\P5026R1 sequence listing.txt

Output Set: N:\CRF4\08132004\J643795A.raw

7 <110> APPLICANT: FREDERIC J. DESAUVAGE  
 8 GRETCHEN FRANTZ  
 9 KENNETH J. HILLAN  
 10 PAUL POLAKIS  
 11 ANDREW POLSON  
 12 VICTORIA SMITH  
 13 SUSAN D. SPENCER  
 14 THOMAS D. WU  
 15 ZEMIN ZHANG  
 17 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE DIAGNOSIS AND  
 18 TREATMENT OF TUMOR  
 20 <130> FILE REFERENCE: P5026R1-US  
 22 <140> CURRENT APPLICATION NUMBER: US 10/643,795A  
 23 <141> CURRENT FILING DATE: 2003-08-19  
 25 <150> PRIOR APPLICATION NUMBER: US 60/404,809  
 26 <151> PRIOR FILING DATE: 2002-08-19  
 28 <150> PRIOR APPLICATION NUMBER: US 60/405,645  
 29 <151> PRIOR FILING DATE: 2002-08-21  
 31 <150> PRIOR APPLICATION NUMBER: US 60/413,192  
 32 <151> PRIOR FILING DATE: 2002-09-23  
 34 <150> PRIOR APPLICATION NUMBER: US 60/419,008  
 35 <151> PRIOR FILING DATE: 2002-10-15  
 37 <150> PRIOR APPLICATION NUMBER: US 60/426,847  
 38 <151> PRIOR FILING DATE: 2002-11-15  
 40 <150> PRIOR APPLICATION NUMBER: US 60/484,959  
 41 <151> PRIOR FILING DATE: 2003-07-02  
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 45 <210> SEQ ID NO: 1  
 46 <211> LENGTH: 1870  
 47 <212> TYPE: DNA  
 48 <213> ORGANISM: Homo sapien  
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 55 gttccagaag caagccttcc tcatcttatg cctgctgtcg gctgcctttg 150  
 57 cgcccactctg tgtgggcacg gtcttcctgg gtttcacacc tgaccaccac 200  
 59 tgccagagtc ctgggggtggc tgagctgagc cagcgctgtg gctggagccc 250  
 61 tgcggaggag ctgaactata cagtgccagg cctggggccc gcgggcgagg 300  
 63 ccttccttgg ccagtgcagg cgctatgaag tggactggaa ccagagcgcc 350  
 65 ctgagctgtg tagacccctt ggctagcctg gccaccaaca ggagccacct 400  
 67 gccgctgggt ccctgccagg atggctgggt gtatgacacg ccgggtctt 450  
 69 ccacgtcac tgagttcaac ctggtgtgtg ctgactcctg gaagctggac 500  
 71 ctctttcagt cctgtttgaa tgcgggcttc ttgtttggct ctctcggtgt 550



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73  tggctacttt  gcagacaggt  ttggccgtaa  gctgtgtctc  ctgggaactg  600
75  tgctgggtcaa  cgcggtgtcg  ggcgtgtcca  tggccttctc  gccaactac  650
77  atgtccatgc  tgctcttccg  cctgctgcag  ggcttggtca  gcaagggcaa  700
79  ctggatggct  ggctacaccc  taatcacaga  atttggtggc  tcgggctcca  750
81  gaagaacggg  ggcgatcatg  taccagatgg  ccttcacggg  ggggctggtg  800
83  gcgcttacgg  ggctggccta  cgccctgcct  cactggcgct  ggctgcagct  850
85  ggcagtctcc  ctgcccacct  tctcttccct  gctctactac  tgggtgtgtg  900
87  cggagtcccc  tcggtggctg  ttatcacaaa  aaagaaacac  tgaagcaata  950
89  aagataatgg  accacatcgc  tcaaaagaat  ggggaagttg  ctctgtctga  1000
91  tttaaagatg  ctttccctcg  aagaggatgt  caccgaaaag  ctgagccctt  1050
93  catttgacaga  cctgttccgc  acgcgcgcgc  tgaggaagcg  caccttcac  1100
95  ctgatgtacc  tgtggttcac  ggactctgtg  ctctatcagg  ggctcatcct  1150
97  gcacatgggc  gccaccagcg  ggaacctcta  cctggatttc  ctttactccg  1200
99  ctctggctga  aatcccgggg  gccttcacag  cctcatcac  cattgaccgc  1250
101  gtgggcccga  tctaccccat  ggccatgtca  aatttggttg  cgggggcagc  1300
103  ctgcctcgtc  atgattttta  tctcacctga  cctgcactgg  ttaaactca  1350
105  taatcatgtg  tgttgccga  atgggaatca  ccattgcaat  acaaatgatc  1400
107  tgcctgggtg  atgctgagct  gtacccaca  ttcgtcagga  acctcggagt  1450
109  gatgggtgtg  tctccctgt  gtgacatagg  tgggataatc  acccccttca  1500
111  tagtcttcag  gctgaggagg  gtctggcaag  ccttgccct  cattttgttt  1550
113  gcgggtgttg  gcctgtctgc  cgcgggagtg  acgctacttc  ttccagagac  1600
115  caagggggtc  gctttgccag  agaccatgaa  ggacgccgag  aaccttgga  1650
117  gaaaagcaaa  gcccaagaa  aacacgattt  accttaaggt  ccaaacctca  1700
119  gaacctcgg  gcacctgaga  gagatgtttt  gcggcgatgt  cgtgttgagg  1750
121  ggatgaagat  ggagttatcc  tctgcagaaa  ttcctagacg  ctttcacttc  1800
123  tctgtattct  tctcatact  tgccacccc  caaattaata  tcagtcctaa  1850
125  agaaaaaaaa  aaaaaaaaa  1870
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128 <211> LENGTH: 731
129 <212> TYPE: DNA
130 <213> ORGANISM: Homo sapien
132 <220> FEATURE:
133 <221> NAME/KEY: Unsure
134 <222> LOCATION: 570, 575, 607, 611, 642, 672, 678
135 <223> OTHER INFORMATION: Unknown base
137 <400> SEQUENCE: 2
138  aattagcata  acccttcctc  aggaagagtg  agattttata  tttgacaata  50
140  aagtgttaga  ctccatttct  aaataccaga  cttcaaaaaga  taaggttcaa  100
142  aagtgttata  agaagatatt  ctttttttg  tcctagagaa  cttattttcc  150
144  tgtgaaaatg  cctaccacaa  agaagacatt  gatgttctta  tcaagctttt  200
146  tcaccagcct  tgggtccttc  attgtaattt  tgctctattc  ttgggacaca  250
148  agcatggatc  accagtacaa  ttgctgttag  agactctgct  tcaaatggga  300
150  gcattttcat  cacttacgga  ctttttcgtg  gggagagtag  tgaagaattg  350
152  agtcacggac  ttgcagaacc  aaagaaaaag  tttgcagttt  tagagatact  400
154  gaataattct  tcccaaaaa  ctctgcattc  ggtgactatc  ctgttccctg  450
156  tctgagttt  gatcacgtcg  ctgctgagct  ctgggtttac  cttctacaaa  500
158  cagcatcagc  aacccttacc  agacattcct  ggggcccgac  gggggtgtac  550
W--> 160  acctgggaac  gggcttcggg  gcatncttcg  tttttggtga  ccatgatact  600
162  gggttgnngg  naacacgcag  gtcccacca  actcttccga  anaagttgtt  650

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## RAW SEQUENCE LISTING

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164  tccaaaatgc tttacccccg gnaaccancc agtaaaggaa cgacccccaca 700
166  ggtaccggat actcgtgctg gctcatactg g 731
168  <210> SEQ ID NO: 3
169  <211> LENGTH: 2974
170  <212> TYPE: DNA
171  <213> ORGANISM: Homo sapien
173  <400> SEQUENCE: 3
174  gatcagtgtg tgagggaact gccatcatga ggtctgacaa gtcagctttg 50
176  gtattttctgc tcctgcagct cttctgtgtt ggctgtggat tctgtgggaa 100
178  agtcctggtg tggccctgtg acatgagcca ttggcttaat gtcaagggtca 150
180  ttctagaaga gctcatagtg agaggccatg aggtaacagt attgactcac 200
182  tcaaagcctt cgtaattga ctacaggaag cttctgcat tgaaatttga 250
184  ggtggtccat atgccacagg acagaacaga agaaaatgaa atatttggtg 300
186  acctagctct gaatgtcttg ccaggcttat caacctggca atcagttata 350
188  aaattaaatg atttttttgt tgaaataaga ggaactttaa aaatgatgtg 400
190  tgagagcttt atctacaatc agacgcttat gaagaagcta caggaaacca 450
192  actacgatgt aatgcttata gacctgtga ttccctgtgg agacctgatg 500
194  gctgagttgc ttgcagtcct ttttgtgctc acacttagaa tttctgtagg 550
196  aggcaatatg gagggaagct gtgggaaact tccagctcca ctttcctatg 600
198  tacctgtgcc tatgacagga ctaacagaca gaatgacctt tctggaaaga 650
200  gtaaaaaatt caatgctttc agttttgttc cacttctgga ttcaggatta 700
202  cgactatcat ttttggaag agttttatag taaggcatta ggaaggccca 750
204  ctacattatg tgagactgtg ggaaaagctg agatatggct aatacgaaca 800
206  tattgggatt ttgaatttcc tcaaccatac caacctaaact ttgagtttgt 850
208  tggaggattg catgtaaac ctgccaaagc tttgcctaag gaaatggaaa 900
210  attttgtcca gagttcaggg gaagatggta ttgtggtgtt ttctctgggg 950
212  tcaactgtttc aaaatgttac agaagaaaag gctaatatca ttgcttcagc 1000
214  ccttgcccag atcccacaga aggtgttatg gaggtacaaa ggaaaaaac 1050
216  catccacatt aggagccaat actcggctgt atgattggat accccagaat 1100
218  gatcttcttg gtcatcccaa aaccaaagct tttatcactc atggtggaat 1150
220  gaatgggata tatgaagcta ttaccatgg ggtccctatg gtgggagttc 1200
222  ccatatttgg tgatcagctt gataacatag ctcacatgaa ggccaaagga 1250
224  gcagctgtag aaataaactt caaaactatg acaagcgaag atttactgag 1300
226  ggctttgaga acagtcatta ccgattcctc ttataaagag aatgctatga 1350
228  gattatcaag aattcaccat gatcaacctg taaagccctt agatcgagca 1400
230  gtcttctgga tcgagtttgt catgcgccac aaaggagcca agcacctgcg 1450
232  atcagctgcc catgacctca cctggttcca gcactactct atagatgtga 1500
234  ttgggttctt gctgacctgt gtggcaactg ctatatctt gttcacaaaa 1550
236  tgttttttat tttcctgtca aaaatttaaat aaactagaa agatagaaaa 1600
238  gagggaatag atctttccaa attcaagaaa gacctgatgg ggtaatcctg 1650
240  ttaattccag ccacatagaa tttggtgaaa accttgctat tttcatatta 1700
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246  actctcttct ctcactttgt gacacaagga catgaataca tctaaatttt 1850
248  cctatttctg atatgactgt tttgatgatg tcattacttc tataacctta 1900
250  agtgataggg tgacatgcaa tatgattatt cctggtgtgc gcccaaacac 1950
252  atggatataa agaggtaaaa aacttaaaat tcacaaaatt cagtaaacca 2000
254  cacaaatcag gtaagtgttc tatgagatta gctggctatg agaaacataa 2050
256  tgatgtttct ttttcaattt aaataagcct ttctacatag ccagcatcag 2100

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258  tgatctcaga aaataaattg ctaataatga tgacatggca ttatgcttag 2150
260  aaaagtttgc tgtattttcca tagacctcat ctagatgtca tggcctacat 2200
262  ttctgccatc actcaaccaa tacttttttc tgttttcttg atgataaaaa 2250
264  gacctttctc atgattgccca tcaaataaca aaagaaacta ttttttttct 2300
266  cacatagaga acatgtcagt aagatattca aggtgaacag atatttttgg 2350
268  gattagtaac tatttgaaat atgtggtgat aattactgag tttataaaat 2400
270  ttatttgata gtacacttaa agaagattta tatgtttatt ctttaaaaaat 2450
272  gatgaatact cataattctt atctctataa tcaaaagtat aatttactgt 2500
274  agaaaaataa agagatgctt gttctgaaag taagatcagt gaactgcttt 2550
276  tcagtctcaa tctttgagaa ttgtaaattc atcaaataat tgcttacata 2600
278  gtaaaaattt aaggtattag aaaacctgca taacaaatag tattatatat 2650
280  taaatatatt gatatgtaaa gctctacaca aagctaaata tagtgtaata 2700
282  atgtttacac tagtaagcaa atatgttaat cttctcattt ttttactgtc 2750
284  atataatctt agtgatatgc ctattaatag ttttaataaa ataaattggc 2800
286  ttatctggct ttttgaaaat tttgaaattc ttacagatgt tgattaggta 2850
288  tatctacaaa ttaatttcaa ttttaaaatg atgatataaa aataaatata 2900
290  agtatttttc ttgtgtatgt atacaataaa tataaataaa attgtttact 2950
292  gttttgaaag tttcttaagt tttta 2974
294 <210> SEQ ID NO: 4
295 <211> LENGTH: 2459
296 <212> TYPE: DNA
297 <213> ORGANISM: Homo sapien
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304  cggacaaggc cacctcgccg ctctcgctgg atgctggcct cgggcaggcc 150
306  ccctggagcg acctgcttct ttgggcactg ttgctgaaca gggcacagat 200
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312  gaggcagcac ggaggaaaga cctggcggtc aagtttgagg ggatgggcgt 350
314  tgacctcttt ggcgagtgc atcgagcag tgaggtgagg gctgcccgcc 400
316  tcctcctccg tcgctgcccg ctctgggggg gatgccactt gcctccagct 450
318  ggccatgcaa gctgacgccc gtgccttctt tgcccaggat ggggtacagt 500
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322  tgggacctgg ttctcgctt cttttgccct ccactcatct acaccgcct 600
324  catcaccttc aggaaatcag aagaggagcc cacacgggag gagctagagt 650
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328  ccagccgaga agacgccgct ggggggcccg cgccagtcgg gccgtccggg 750
330  ttgctgcggg ggccgctgcg gggggcgccg gtgcctacgc cgctggttcc 800
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336  ggcgcgcgcc ggctccctgg agctgctgct ctatttcttg gctttcacgc 950
338  tgctgtgcga ggaactgcgc cagggcctga gcggaggcgg gggcagcctc 1000
340  gccagcgggg gccccgggcc tggccatgcc tcaactgagcc agcgcctgcg 1050
342  cctctacctc gccgacagct ggaaccagtg cgacctagt gctctcact 1100
344  gcttctcctt gggcggtggc tgccggctga ccccggttt gtaccacctg 1150
346  ggccgcactg tcctctgcat cgacttcatg gttttcacgg tgcggctgct 1200
348  tcacatcttc acggtcaaca aacagctggg gcccaagatc gtcactcgtga 1250
350  gcaagatgat gaaggacgtg ttcttcttcc tcttcttctt cggcgtgtgg 1300

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354 tgacttccca agtatcctgc gccgcgtctt ctaccgtccc tacctgcaga 1400
356 tcttcgggca gattccccag gaggacatgg acgtggccct catggagcac 1450
358 agcaactgct cgtcggagcc cggcttctgg gcacaccctc ctgggggcca 1500
360 ggcggggcacc tgcgtctccc agtatgccaa ctggctggtg gtgctgctcc 1550
362 tcgtcatctt cctgctcgtg gccaacatcc tgctggtcaa cttgctcatt 1600
364 gccatgttca gttacacatt cggcaaagta cagggaaca gcgatctcta 1650
366 ctggaaggcg caggttaccg cctcatccgg gaattccact ctcgcccg 1700
368 gctggccccg ccctttatcg tcatctccca cttgcgcctc ctgctcaggc 1750
370 aattgtgcag gcgaccccg agcccccagc cgtcctcccc ggccctcgag 1800
372 catttcggg tttacctttc taaggaagcc gagcgaagt gctaacgtgg 1850
374 gaatcggtgc ataaggagaa ctttctgctg gcacgcgcta gggacaagcg 1900
376 ggagagcgac tccgagcgtc tgaagcgcac gtcccagaag gtggacttgg 1950
378 cactgaaaca gctgggacac atccgcgagt acgaacagcg cctgaaagtg 2000
380 ctggagcggg aggtccagca gtgtagccgc gtccctggggg ggggtggccga 2050
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384 acctgcctgg gtccaaagac tgagccctgc tggcggaact caaggagaag 2150
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388 cccgcacctg gtggccttgt ccttgagggt agcccatgt ccactctggc 2250
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392 ccggtcctc ccagaaccag tcccagcctg ggaggatcaa ggcctggatc 2350
394 ccgggcccgtt atccatctgg aggtgcagg gtccctgggg taacagggac 2400
396 cacagacccc tcaccactca cagattcctc acactgggga aataaagcca 2450
398 tttcagagg 2459
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401 <211> LENGTH: 1450
402 <212> TYPE: DNA
403 <213> ORGANISM: Homo sapien
405 <220> FEATURE:
406 <221> NAME/KEY: Unsure
407 <222> LOCATION: 2
408 <223> OTHER INFORMATION: Unknown base
410 <400> SEQUENCE: 5

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415 cagcccacct ccacgcttcc ttaacggaga ggtgcaggac tcagacttca 150
417 ccagcccact cgggtccagc cttgtacgca aagagacgcc aaggacgcgc 200
419 tctcccgcgt ccaggcagcc ccagcttgtg ggcttgctg cccgcctgcg 250
421 tgcagcactc ggccggcgtg cagcatgacc ctgtggaacg gcgtactgcc 300
423 tttttacccc cagccccggc atgccgcagg cttcagcggt ccactgctca 350
425 tcgttattct agtgtttttg gctctagcag caagcttcct gctcatcttg 400
427 ccgggggatcc gtggccactc gcgctggttt tggttggtga gagttcttct 450
429 cagtctgttc ataggcgag aaattgtggc tgtgcacttc agtgcagaat 500
431 ggttcgtggg tacagtgaac accaacacat cctacaaagc cttcagcgca 550
433 gcgcgcgtta cagcccgtgt cggctctgctc gtgggcctgg agggcattaa 600
435 tattacactc acagggaccc cagtgcata gctgaacgag accattgact 650
437 acaacgagca gttcacctgg cgtctgaaag agaattacgc cgcggagtac 700
439 gcgaacgcac tggagaaggg gctgccggac ccagtgtctt acctggcgga 750
441 gaagttcaca ccgagtagcc cttgcggcct gtaccaccag taccacctgg 800

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RAW SEQUENCE LISTING ERROR SUMMARY  
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Input Set : A:\P5026R1 sequence listing.txt  
Output Set: N:\CRF4\08132004\J643795A.raw

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; N Pos. 570,575,607,611,642,672,678  
Seq#:5; N Pos. 2  
Seq#:9; N Pos. 898,1187,1198,1241,1262,1266,1277,1281  
Seq#:11; N Pos. 11,30,39,45  
Seq#:13; N Pos. 3505,3583  
Seq#:46; N Pos. 434,435,450  
Seq#:50; N Pos. 2039,2040,2041,2042  
Seq#:65; N Pos. 1391,1399,1418,1421,1431,1446,1449,1456,1463,1469  
Seq#:68; N Pos. 404,405,406,407,408,409,410,411,412,413,414,415,416,417,418  
Seq#:68; N Pos. 419,420,421,422,423,424,425,426,427,428,429,430,431,432,433  
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Seq#:68; N Pos. 464,465,466,467,468,469,470,471,472,473,474,475,502,510,517  
Seq#:68; N Pos. 531,546,552,559,569,575,583,590,591,702,703,704,705,706,707  
Seq#:68; N Pos. 708,709,710,711,712,713,714,715,716,717,718,719,720,721,722  
Seq#:68; N Pos. 723,724,725,726,727,728,729,730,731,732,733,734,735,736,737  
Seq#:68; N Pos. 738,739,740,741,742,743,744,745,746,747,748,749,750,751,785  
Seq#:68; N Pos. 786,791,814,826,846,886,897,932,939  
Seq#:75; N Pos. 3356,3743,3962,3966,3968,3976,3988  
Seq#:89; Xaa Pos. 233,328,333



**VERIFICATION SUMMARY**

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Input Set : A:\P5026R1 sequence listing.txt

Output Set: N:\CRF4\08132004\J643795A.raw

L:160 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:550  
M:341 Repeated in SeqNo=2  
L:411 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0  
L:772 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:850  
M:341 Repeated in SeqNo=9  
L:947 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0  
L:1282 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:3500  
M:341 Repeated in SeqNo=13  
L:4699 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:400  
L:5198 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:2000  
L:6497 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65 after pos.:1350  
M:341 Repeated in SeqNo=65  
L:6762 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68 after pos.:400  
M:341 Repeated in SeqNo=68  
L:7869 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75 after pos.:3350  
M:341 Repeated in SeqNo=75  
L:9685 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:225  
M:341 Repeated in SeqNo=89